# **VDH Zika Virus Testing Recommendations**

Testing at private laboratories is encouraged. Providers may discuss case-by-case scenarios with their local health department (LHD) when public health testing is desired and testing at a private lab is not feasible (e.g., uninsured patient). Providers should contact their LHD regarding potential birth defects or any unusual routes of Zika virus exposure (e.g., transfusion, transplant, lab exposure, or suspected local Zika virus transmission). Please refer to CDC's website on Zika virus for additional information.

Population	Testing Recommendations	Comments
Adults		
Symptomatic* pregnant women with recent travel to areas with active dengue transmission and a risk of Zika virus (colored purple on CDC Zika Travel map)	Zika virus PCR (serum and urine) AND Dengue virus PCR (serum) and Dengue virus IgM (serum)	<ul> <li>Collect specimen as soon as possible up to 12 weeks after symptom onset.</li> <li>If IgM antibody or PCR for dengue is positive, this is adequate evidence of a dengue infection and no further testing is indicated.</li> <li>If Zika virus PCR is positive on a single specimen, repeat Zika virus PCR on newly extracted RNA from same specimen to rule out false-positive.</li> </ul>
Symptomatic* pregnant women who have had sex with someone who lives in or recently traveled to areas with a risk of Zika virus	Zika virus PCR (serum and urine)	<ul> <li>Collect specimen as soon as possible up to 12 weeks after symptom onset.</li> <li>If Zika virus PCR is positive on a single specimen, repeat Zika virus PCR on newly extracted RNA from same specimen to rule out false-positive.</li> </ul>
Pregnant women with prenatal ultrasound findings consistent with Congenital Zika Syndrome† (CZS) living in or with recent travel to an area with risk of Zika	Zika virus PCR (maternal serum and urine) and Zika virus IgM (maternal serum) testing	<ul> <li>If Zika virus PCRs are negative and IgM is positive, confirmatory PRNTs should be performed against Zika and dengue.</li> <li>In the case of pregnancy loss due to possible CZS or infant death following live birth, testing of placental and fetal tissue may be considered. Contact LHD to discuss further.</li> </ul>
Asymptomatic pregnant women with recent travel to an <u>area with risk of Zika</u> outside the U.S. and its territories	Zika virus testing is NOT routinely recommended. However, Zika virus PCR testing may be considered up to 12 weeks after travel.	<ul> <li>If Zika virus PCR testing is pursued, collect specimen within 12 weeks after travel.</li> <li>Serologic testing is not recommended because of the potential for prolonged detection of Zika virus IgM, making it difficult to interpret whether infection, and therefore risk of congenital Zika virus infection, occurred during the current pregnancy. Notable cross-reactivity between dengue and Zika antibodies can also cause Zika virus IgM results to be falsely positive.</li> </ul>
Asymptomatic pregnant women living in or with recent travel to the U.S. and its territories	Zika virus testing is not routinely recommended	- Testing is not routinely recommended because, with declining prevalence of Zika virus disease, there is an increased probability of false positive test results.
Symptomatic* non-pregnant persons living in or with recent travel an area with risk of Zika	Not recommended	- Based on the current epidemiology of these viruses, Zika testing is not recommended for this group. Persons should instead follow the <u>testing guidance for dengue virus</u> .
Pre-conception counseling	Not recommended	- Zika virus testing is no longer recommended as part of pre-conception counseling or for any asymptomatic non-pregnant persons.

<sup>\*</sup>Zika virus symptoms- Patient presents with at least one of the following symptoms: fever, maculopapular rash, arthralgia, or conjunctivitis, Guillain-Barré syndrome, complications of pregnancy (e.g., fetal loss, fetus with congenital microcephaly, intracranial calcifications, structural brain or eye abnormalities).

Please note: No countries are currently reporting an outbreak of Zika. In the event a country reports an outbreak of Zika virus (colored red on the CDC Zika Travel map), follow the testing guidance in MMWR: Dengue and Zika virus diagnostic testing for patients with a clinically compatible illness and risk for infection with both viruses.

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<sup>†</sup>Congenital Zika Syndrome- Includes brain abnormalities and/or microcephaly, intracranial calcifications, ventriculomegaly, eye abnormalities, or other consequences of central nervous system dysfunction including arthrogryposis (joint contractures), congenital hip dysplasia, and congenital deafness)

Population	<b>Testing Recommendations</b>	Comments
Infants		
Infant with CZS <sup>†</sup> born to mother with possible Zika virus exposure, regardless of maternal testing result	Zika virus PCR (infant serum and urine) and Zika virus IgM (infant serum)	<ul> <li>Ideally specimens should be collected ≤2 days after birth.</li> <li>Standard evaluation, head ultrasound, comprehensive ophthalmologic exam, and automated auditory brainstem response (ABR) is recommended by 1 month of age. Evaluate for other causes of congenital anomalies.</li> <li>Notify LHD of suspected birth defect.</li> </ul>
Infant without CZS <sup>†</sup> born to mother with laboratory evidence of Zika virus infection during her pregnancy	Zika virus PCR (infant serum and urine) and Zika virus IgM (infant serum)	<ul> <li>Ideally specimens should be collected ≤2 days after birth.</li> <li>Standard evaluation, head ultrasound, comprehensive ophthalmologic exam, and automated auditory brainstem response (ABR) is recommended by 1 month of age.</li> </ul>
Infants without CZS <sup>†</sup> born to mother with possible Zika virus exposure, but without laboratory evidence of Zika virus infection, during her pregnancy	Testing infant for Zika virus is not routinely recommended	- All infants should receive a standard evaluation at birth and at each well-child visit.

#### **Revisions:**

### 12/2019

- Symptomatic pregnant women with sexual exposure should be tested by Zika virus PCR only.
- Specimen for all non-congenital Zika virus testing should be collected within 12 weeks of symptom onset or travel.

### 11/2019

- Symptomatic non-pregnant persons are not recommended for Zika virus testing and should be referred to testing for dengue.
- Symptomatic pregnant women are no longer routinely recommended for Zika virus IgM testing.
- Asymptomatic pregnant women are no longer routinely recommended for Zika virus testing.

## 9/2019

- Dengue testing should be conducted concurrently for symptomatic pregnant and non-pregnant persons with travel.

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<sup>†</sup>Congenital Zika Syndrome- Includes brain abnormalities and/or microcephaly, intracranial calcifications, ventriculomegaly, eye abnormalities, or other consequences of central nervous system dysfunction including arthrogryposis (joint contractures), congenital hip dysplasia, and congenital deafness)

Please note: No countries are currently reporting an outbreak of Zika. In the event a country reports an outbreak of Zika virus (colored red on the CDC Zika Travel map), follow the testing guidance in MMWR: Dengue and Zika virus diagnostic testing for patients with a clinically compatible illness and risk for infection with both viruses.